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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-7. (cancelled).

Add new claims 8 and 9 as follows:

8. (new) A test structure for use in the optical monitoring of erosion on a wafer, said test structure comprising:

at least one upper layer having an array formed by an alternating pattern of metal and dielectric material; and

a lower layer defined by a flat reflective material to reduce the number of measurement variables associated with the optical monitoring of the test structure.

9. (new) A method of monitoring erosion caused by polishing a semiconductor wafer comprising the steps of:

forming a test structure in the scribe lines between dies on a wafer, said test structure including at least one upper layer having an array formed by an alternating pattern of metal and dielectric material and a lower layer defined by a flat reflective material;

directing a probe beam of radiation to reflect off the test structure;

monitoring the probe beam of radiation after reflection from the test structure and generating output signals in response thereto; and

evaluating the erosion of the test structure based on the output signals.

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